REMARKS

- 1. In response to the Office Action dated April 10, 2007, applicant has retained claims 115-121, 230-237 and 286-297 in the application. Applicant has amended claims 118 and 120 to overcome the objections of the Examiner. Applicant has made minor amendments to a number of the claims to correct informalities noted by applicant's attorney upon a further study of the claims. Applicant has also amended a number of the claims to sharpen the patentable distinction over the cited references.
- 2. Claims 115-121, 230-237, 286-287, 289, 292, 294 and 296 have been rejected by the Examiner Under 35 U.S.C. 102(b) as being anticipated by Barkan International Publication No. WO 98/17042. As now written, the claims are allowable over Barkan for a number of important reasons. These are discussed in subsequent paragraphs. Applicant discusses in separate paragraphs the different ways in which the claims distinguish over the prior art. Although each discussion relates to an individual claim, it will be appreciated that each discussion can be generalized to all of the claims.
- a. The claims recite in the preamble "the steps at the server of...." Applicant then recites the method steps performed at the "server." Barkan discloses three elements in Figure 1. They are the user 1, the user 2 and the mail server 3. The user 1 in Barkan may correspond to the sender in applicant's invention; the user 2 in Barkan may correspond to the recipient in applicant's invention; and the mail server 3 in Barkan may correspond to the server in applicant's invention. The mail server 3 in Barkan does not send the message from the user 1 to the user 2. This may be seen from the following statements in Barkan:

Page 15, lines 19-23:

- "e. The e-mail program at the first user 1 uses the public key for the second user 2 to encrypt the first message to be sent, to create a second message;
- "f. the e-mail platform <u>at the first user 1 sends the second message to</u> the E-mail address 22 of the second user 2."

In none of the nine (9) methods in Barkan does Barkan state that the user 1 sends the message, or even an encryption of the message, to the mail server 3.

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- b. In applicant's system, the server sends the message (not the encryption of the message) to the destination address of the recipient. In Barkan, the user 1 sends the encryption of the message to the user 2. The encryption of the message is not the same as the message. The sending of the encrypted message may be seen from the statements quoted above in lines 19-23 on page 15 of Barkan. Furthermore, in some of the embodiments of Barkan, a plurality of encryptions disposed in a multi-layered relationship and relating to the message are sent by the user 1 to the user 2. See, for example the discussion by Barkan on page 18, lines 18-22 and pages 23-24. Applicant's method does not require such complications.
 - c. The last paragraph of claim 115 reads as follows:

 "transmitting to the sender the message, and the verification of the message, for storage by the sender."

This occurs <u>before</u> the authentication of the message in applicant's system. The Examiner has cited page 33, first paragraph, in Barkan against this recitation. Page 33, first paragraph in Barkan reads as follows:

"Mail server 3 also sends to user 1 a message including the encrypted message from user 2, see Fig. 4, concurrently with the transmission of the second symmetrical key to user 2."

This paragraph does not indicate a transmission of the verification of the message. Furthermore, this occurs <u>after</u> the authentication of the message. See page 32, paragraph h(1). This paragraph indicates that the message has been previously authenticated. There is a big difference between what happens <u>before</u> the authentication of the message and what happens after the authentication of the message. It doesn't matter if the message is disposed of after the authentication of the message. It does matter if the message is disposed of before the authentication of the message. Under such circumstances, the message may not be able to be authenticated.

d. Barkan discloses nine (9) different methods. The Examiner has applied the Abstract, three (3) different methods and individual pages separated from the methods in Barkan against the five (5) steps recited in claim 115 in order to reject claim 115 as anticipated in Barkan. This may be seen from the following chart relating to claim 115 and the citation by the Examiner from Barkan against the method steps in claim 115.

<u>Claim 1</u>			
Method steps in Claim 115	Method cited in Barkan	Abstract	Pages cited in Barkan before Disclosure of Methods
Receiving — Sender	3, 2		
Transmitting — Address	3, 4	Yes	12
Receiving — Server	3, 2	Yes	8
Maintaining — Message	4	Yes	9
Transmitting — Sender	4		

As will be seen, none of the methods in Barkan has been cited against all of the steps recited in claim 115. Actually, method 2 in Barkan is cited against only two (2) of the five (5) steps in claim 115; method 3 in Barkan is cited against only three (3) of the five (5) steps recited in claim 115; and method 4 in Barkan is cited against only three (3) of the five (5) steps recited in claim 1. In addition, the Abstract in the claim is cited against only three (3) of the five (5) steps recited in claim 1; and independent pages (12, 8 and 9) are cited against only three (3) of the five (5) steps recited in claim 1. The citation of three (3) different methods (2, 3 and 4) in Barkan against claim 1 prevents claim 1 from being anticipated by Barkan. Furthermore, pages 31, 32 and 33 in Barkan's method 4 deals only with encryption of a message at one station (e.g., user 2) and a decryption of the message at the other station (e.g., user 1). In applicant's method, any encryption and decryption to provide authentication is performed at the server (and not at the sender or recipient) and only to provide authentication.

The nine (9) methods in Barkan are independent from one another. Because of this, it is not proper for the Examiner to cite isolated steps from three (3) different methods to reject claim 115. If this was proper, no claim would be allowed in any application because a different and unrelated prior art reference could be cited against each step in a method claim and each element in an apparatus claim.

Claim 230 is the only other independent claim in the application. Claim 230 is allowable over Barkan for the same reasons as expressed in the previous paragraphs for claim 115. Furthermore, there does not appear to be any paragraph j on pages 23-24, 29-30 or 31-32.

e. In applicant's method, the server sends the message and the verification of the message to the sender and then disposes of the message at the server before any authentication of the message. In this way, only the sender has the message and the message verification. This is recited in claim 116. This relieves the server of retaining the message and the verification and transfers this responsibility to the sender, who generally decides when he wishes to obtain authentication.

The Examiner has cited page 35, step 1 in Barkan, against claim 116. Page 35, paragraph 1, reads as follows:

> "(1)If the messages are identical, server 3 is noticed to that effect. Server 3 can then delete all the files relating to the transaction, except maybe some details for further referral."

There are considerable differences between Barkan and The Examiner's interpretation of Barkan. As will be seen from the quotation on page 35, step 1 of Barkan, Barkan discards the message, and the files relating to the message, after the message has been authenticated. The Examiner appears to interpret the paragraph quoted above that Barkan discards the message before any authentication. If Barkan discards the message before ay authentication, how will Barkan thereafter obtain authentication?

- f. In claim 118, the Examiner cites steps allegedly performed by the mail server 3. These steps are allegedly disclosed on pages 23 (method 3) and 29-30 and 34 (method 4) of Barkan. As applicant has previously indicated, it is not proper for the Examiner to cite in combination isolated steps from different methods such as methods 3 and 4. Furthermore, the steps cited on pages 23-24, 29-30 and 34 are largely performed by the users 1 and 2 rather than the mail server 3. Because of this, the mail server 3 in Barkan does not perform all of the steps recited in claim 118 to be performed by the server.
- Claim 120 recites steps performed at the server to authenticate the g. message. The Examiner has cited pages 23-24, steps j-h, 29-30, 31-32 and 34 in Barkan. As indicated above in section e., authentication in Barkan is largely performed at the users 1 and 2.

Furthermore, the authentication is provided in Barkan by comparing the messages at user 1 and user 2. See page 34, paragraphs 1 and 2 in Barkan. The comparison by user 1 and 2 in Barkan is not provided by the mail server. Barkan is accordingly not a proper reference against claim 120.

h. The steps recited in claim 121 are not provided by the mail server 3 in Barkan. This may be seen from the discussion above in section a-g. Pages 23 and 24 in Barkan discuss five (5) different messages, some encrypted. Which of the five (5) different messages is the Examiner discussing with respect to claim 121? Pages 29 and 30 in Barkan also discuss different messages but the message on pages 29-30 of Barkan are different from the messages on pages 23-24 in Barkan. In the discussion on page 9 of the Office Action dated April 10, 2007 to which of the multiple messages on pages 23-24 and 29-30 of Barkan is the Examiner referring? This shows that Barkan is not a proper reference against claim 121.

The same weakness in the Examiner's citation of Barkan against claim 121 applies to the Examiner's citation of Barkan against claim 120.

i. As indicated in section j, Barkan produces a number of different messages in order to transfer the message at the user 1 to the user 2. For example, in method 1 on pages 14-17 of Barkan, Barkan provides steps a-f on page 15 to transmit the message at user 1 to user 2. Actually, applicant is giving Barkan and the Examiner the benefit of the doubt since Barkan is including more than one (1) step in paragraph (a) and more than one step in paragraph (b). In contrast, applicant performs two (2) steps to transfer the message from the sender to the destination address. These two (2) steps in applicant's method are (a) the transfer of the message from the server and (b) the transfer of the message from the server to the destination address. It is well recognized in patent law that a method is patentable if it can perform a function in a reduced number of steps than in the prior art. Applicant's transfer of a message from a sender through a server to a destination address is provided in two (2) steps whereas this transfer of the message from user 1 to user 2 in Barkan occurs in at least five (5) steps.

Of course, the increased number of steps in Barkan results in part from the encryption of the message by Barkan. This is a fundamental difference (message in applicant's invention versus encrypted message in Barkan) that causes applicant's invention to be patentable

over Barkan regardless of the relative number of steps performed by applicant and Barkan. See section e. above for a discussion of the difference between applicant's message and Barkan's encrypted message.

- j. The Examiner has cited the Abstract, page 12, steps a, b, c, pages 23-24, step h, page 30, step d, page 33, 1st paragraph, and page 34, against claim 230. These citations in Barkan do not disclose any steps at the mail server 3 of providing an electronic attachment including the identity and address of the user, the identity and address of the mail server 3 and the identity and address of the user 2. There is also no disclosure in the citations in Barkan of the step of transmitting the electronic attachment from the mail server 3 to the user 1 after the transmission of the message from the mail server 3 to the user 2, but before any authentication of the message by the mail server 3. Barkan cannot provide this disclosure because this is not how Barkan works.
- k. The Examiner has cited page 44, step e in Barkan, against claim 231. Page 44, step e, in Barkan does not describe that an electronic attachment is transmitted from the mail server 3 to the user 1 and that the electronic attachment includes the address and the identity of intermediate stations receiving the electronic attachment in the transmission of the electronic attachment from the mail server 3 to the user 2. Barkan cannot provide this description because this is not how Barkan works.
- l. According to the Examiner, Barkan discloses the step at the mail server 3 of providing a verification (digital signature) of the attachment at the mail server 3 and transmitting the verification (digital signature) from the mail server 3 to the user 1 at the time of transmitting the attachment from the mail server 3 to the user 1. The Examiner has cited the Abstract, page 12, steps a, b, c, pages 23-24, step h, page 30, step d, page 33, 1st paragraph and page 34 in support of his position. Barkan does not disclose, in the citations specified above in this paragraph l, the statements specified above in this paragraph l. Because of this, claim 232 is allowable over Barkan.
- m. The Examiner has cited the Abstract, page 12, steps a, b, c, pages 23-24, step h, page 30, step 2, page 33, 1st paragraph and page 34 in Barkan against claim 233. Barkan does not disclose the steps of providing a digital signature of the attachment at the mail server 3

and transmitting the digital signature of the attachment from the mail server 3 to the user at the time of transmitting the attachment from the mail server 3 to the user. Any such transmission is from the user 1 to the user 2 in Barkan and not from the mail server 3 to the user 2.

- n. With respect to claim 234, the Examiner has cited the Abstract, page 12, steps a, b, c, pages 23-24, step h, page 30, step d, pages 31-32, page 33, 1st paragraph and page 434 in Barkan. These citations from Barkan do not disclose the steps of receiving an electronic attachment, and a verification of the electronic attachment, at the mail server 3 from the user 1 and authenticating the electronic attachment at the mail server 3 on the basis of the electronic attachment, and the digital signature of the electronic attachment, received by the mail server 3 from the user 1. In Barkan, any authentication is between the user 1 and 2 and not between the mail server 3 and the user 1 or the user 2.
- o. The Examiner has cited pages 23-24, steps j-h and pages 31 and 32 in Barkan against claim 235. Barkan does not disclose the step of authenticating the electronic attachment at the mail server 3 on the basis of the electronic attachment, and a digital signature of the electronic attachment, received by the mail server 3 from the user 1. As previously indicated, authentication is provided between the users 1 and 2 in Barkan.
- p. Barkan does not receive the electronic attachment, and digital signature of the electronic attachment, at the mail server 3 from the user. Barkan also does not disclose the step of providing at the mail server 3 from the user 1 digital fingerprints of the attachment, and the verification of the attachment, from the user 1. There is also no disclosure in Barkan of the step of comparing the digital fingerprints at the mail server 3 to authenticate the message.

 Because of the failure of Barkan to disclose the steps recited in claim 236, claim 236 is allowable over Barkan. The Abstract, page 12 steps a, b, c, pages 23-24 steps j-h, page 30 step d, pages 31-32, paragraph 33, 1st paragraph and page 34 cited by the Examiner from Barkan do not provide such disclosure.
 - q. Claim 237 is allowable over Barkan for the same reasons as claim 236.
- r. With respect to claim 286, Barkan does not disclose on page 34, step j. the step at the mail server 3 of receiving from the user 1 a copy of the message and the digital signature of the message after the transmission of the message to the user 2 but before any

authentication of the message. There is no disclosure in paragraph j on page 34 of Barkan of a delivery of an unencrypted message, or the digital signature of the message, from the user 1 to the mail server 3. Furthermore, Barkan does not disclose on page 23-24 steps j-h and pages 31-32 of Barkan the step of processing the message and the digital signature of the message to determine the authentication of the message, particularly since Barkan does not disclose the first method step recited in claim 286.

- s. The Examiner has cited the Abstract, page 12 steps a, b, c, pages 23-24 step h, page 30 step d, pages 23-24 step h, and page 19 step b in Barkan against claim 287 in an attempt to show that Barkan discloses that the user 1 and the user 2 provide an exchange of data between the user 1 and the user 2 relating to the message from the mail server 3 to the server 2. First of all, the message in the user 1 is transmitted to the user 2, and not to the mail server 3, in Barkan. Secondly, there is no exchange of data between the mail server 3 and the user 2 in Barkan relative to the message during the transmission of the message between the user 1 and the user 2. Since there is no exchange of data between the user 1 and the mail server 3 relating to the message, there is no recording of the data and no transmission of the data to a storage means. Claim 287 is accordingly allowable over Barkan.
- t. According to the Examiner, pages 23, 29-30 and 34 in Barkan disclose that the exchange of data between the mail server 3 and the user 2 in Barkan relating to the message includes the identification of the mail server 3 and the user 2 and the identifications of the server and the destination address and the identifications of the message and an acknowledgement of the receipt of the message by the user 2. First of all, there is no exchange of data between the mail server 3 and the user 2 in Barkan relating to the message. Furthermore, Barkan does not disclose the identifications specified in claim 289. For these reasons, claim 289 is allowable over Barkan.
 - u. Claim 292 recites the following steps:

providing a dialog between the second server and the destination server relating to the message and the electronic attachment during the transmission of the message from the second server to the destination server, through stages between the second server and the

destination server, to establish subsequently that the destination server has received the message, and

storing at least a portion of the dialog between the second server and the destination server relating to the message for subsequent proof of delivery of the message by the second server to the destination server.

Barkan does not disclose on page 23-24 steps j-h, pages 29-30, pages 31-32, any dialog between the mail server 3 and the user 2 relating to the message. Furthermore, Barkan does not store any portion of any such dialog. So that applicant and the Examiner will be on the same wave length, a dialog between two (2) parties involves an exchange of information from each party to the other.

- v. Claim 294 recites that the dialog between the second server and the destination server is included in the electronic attachment. Barkan does not disclose any such dialog in the Abstract, pages 23-24, steps j-h, page 29-30, pages 31-32 and page 34. Barkan also does not disclose that any such dialog is included in the electronic attachment. Claim 294 is accordingly allowable over Barkan.
- w. Claim 296 is allowable over Barkan for substantially the same reason as claim 292.
- 3. Claims 288, 290-291, 293, 295 and 297 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Barkan in view of Zabetian U.S. patent 6,327,656. Claims 283, 290-291, 293, 295 and 297 are allowable over the combination of Barkan and Zabetian because they are dependent from allowable claims. Claims 283, 290-291, 293, 295 and 296 are allowable over the combination of Barkan and Zabetian for a number of additional reasons including the following:
- a. Claim 288 recites that the data exchanged in a dialog between the server and the destination address relating to the message may be via a selected one of SMTP and ESMTP protocols. Barkan does not disclose this in column 4 lines 25-55, column 6, lines 21-37 and column 14, lines 53-66. Furthermore, neither Barkan nor Zabetian discloses that there is data exchanged or dialog between the server and the destination address relating to the message

via a selected one of SMTP and ESMTP protocols. This dialog is used to authenticate the message in applicant's invention.

- b. Claim 290 recites that the data exchanged in the dialog between the server and the destination address relating to the message is used to establish that the message has been received at the destination address. Barkan does not disclose this. Actually, neither Barkan nor Zabetian discloses that there is a dialog between the mail servers and the destination address relating to the message and that data is exchanged in any dialog between the server and the destination address (the names) relating to the message.
- c. The Examiner has cited a combination of Barkan and Zabetian against claim 291. Claim 291 is allowable over Barkan for the reasons discussed above. Furthermore, contrary to the position of the Examiner, Barkan does not provide a dialog between the server and the destination address relating to the message during the transmission of the message from the server to the destination address. There is no such discussion in Barkan since a one-way transmission of information is not a dialog. Furthermore, Barkan discloses that the message is translated from the user 1 to the user 2 and not from the mail server 3 to the user 2. Zabetian also mentions SMTP and ESMTP protocols but Zabetian does not perform the following recited in claim 291:

"providing a <u>dialog</u> between the server and the destination address relating to the message during the transmission of the message from the server to the destination address so as to establish subsequently that the destination address has received the message."

Since neither Barkan nor Zabetian a discloses dialog (a 2-way conversation) between the sender (the user 1) and the server (the mail server 3), they cannot be combined to reject claim 291.

d. Applicant recites in claim 293 that the dialog between the second server and the destination server includes matter relating to the identities of the second server and the destination server and relating to the message. Barkan does not disclose on pages 23, 29-30 and 34 that such a dialog occurs between the mail server 3 and the user 2. This is particularly true since Barkan specifies five (5) messages but the Examiner has not specified which of the five (5) messages he has in mind.

- e. In Claim 295, applicant recites that the dialog between the second server and the destination server includes an acknowledgment by the destination server to the second server that it has received the message Barkan does not disclose in the Abstract and pages 8, 19, 29, Step C and 39, 1st paragraph, that any dialog between the mail server 3 and the user 2 includes an acknowledgment by the user 2 to the mail server 3 that it has received the message. Furthermore, the Examiner has not specified which one of the multiple number of messages indicates to the mail server 3 that it has received the message in Barkan.
- f. Applicant recites a plurality of steps in claim 297. Neither Barkan nor Zabetian discloses any of these steps. For example, Barkan does not disclose in pages 23-24, step j-h, and pages 29-30, 31-32 and 34 the step of providing a dialog between the mail server 3 and the user 2 relating to the message during any transmission of the message between the mail server 3 and the user 2. Neither Barkan nor Zabetian further discloses that there is any transmission of the message between the mail server 3 and the user 2. Neither Barkan nor Zabetian additionally discloses that the dialog between the mail server 3 and the user 2 relating to the message is provided by a selected one of SMTP and ESMTP protocols.
- g. The Examiner has attempted to indicate that a dialog and a communication are the same. A dialog involves an exchange of information between a first party and a second party where both parties contribute to the exchange. A communication involves a transfer of information from a first party to a second party.
- h. Neither Barkan nor Zabetian discloses the step of storing and the limitations in the last two (2) paragraphs in claim 297. Zabetian specifically does not disclose these limitations. Since neither Barkan nor Zabetian discloses the recitations in claim 297, they cannot be combined to reject claim 297.

As will be seen from the above discussion, there are a number of different reasons, all important, why the claims are allowable over Barkan and the combination of Barkan and Zabetian. Accordingly, reconsideration and allowance of the application are respectfully requested.

Should the Examiner have any questions concerning the above amendments and arguments, or any suggestions to obtain allowance, Applicant requests that the Examiner contact Applicant's attorney, John K. Fitzgerald, at 310-824-5555.

It is believed that there are no additional fees due in connection with this response. However, the Commissioner is authorized to charge Deposit Account No. 06-2425 for any unforeseen fees arising from the filing of this amendment.

Date: January 4, 2008 Respectfully submitted,

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